

Preliminary Results – For Discussion Purposes Only

Transmission Rate Case Risk Analysis

Summary

- The risk analysis planned for the 2006 TBL rate case is essentially the same as the approach introduced in the 2002 TBL rate case and reprised in the 2004 rate case.
- While the numerical analysis has not been completed, it appears very unlikely that PNRR will need to be added to the revenue requirement in order to meet BPA's two-year TPP standard of 95%.

Background

- Purpose: to estimate whether and to what extent "Planned Net Revenues for Risk" (PNRR) are needed in the revenue requirement in order to set rates yielding a high probability of making all scheduled BPA payments to the U.S. Treasury (i.e., Treasury Payment Probability, or TPP).
- The 2002 Rate Case was the first time a separate risk analysis was performed as part of the transmission rate case.
- BPA's policy on TPP is 95 percent for a two-year rate period. The equivalent financial performance standard for a three-year rate period is 92.6 percent.

Method

- Pro forma Transmission Business Line income and cash flow statements are modeled with Excel.
- The effect of annual net cash flow on end of year cash reserves is estimated; starting with an historical year and forecasting financial results for years prior to the start of the rate period of interest and then continuing through the anticipated rate period.
- Aggregate categories of revenues and expenses are modeled as uncertain variables defined by distributions instead of point estimates.
- Distributions are based primarily on historical variations in revenue and expense data.
- The @RISK[®] add-in for Excel is needed to use the TBL financial risk model in a Monte Carlo simulation mode.
- In each simulation game, successful payment of the U.S. Treasury is modeled if the TBL has end of year reserve levels of at least \$20 million for liquidity (working capital) requirements. Successful Treasury payment for the rate period requires successful payment in all years of the rate period.
- Monte Carlo simulations of 5000 two-year games are run to estimate the TPP during the rate period.
- An iterative process of successive simulation runs and changes in PNRR input assumptions is employed to find the amount of PNRR necessary to achieve the targeted TPP.

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Assumptions and Caveats

- The pro forma TBL Statement of Cash Flows showing actual accumulated TBL contributions to Agency cash reserves through FY 2003 and projected contributions during FYs 2005 and 2006 will be available to mitigate TBL's financial risks during the rate period.
- Setting PNRR requirements to ensure a high probability of meeting minimum liquidity (working capital) requirements for TBL is sufficient for meeting TBL's responsibility for BPA's TPP standard.
- BPA has recently created an internal Enterprise Risk Management organization and steering committee which are working with TBL to survey and manage the universe of major risks affecting TBL. This work may lead to defining criteria in addition to TPP for success in managing TBL's risks. If so, additional criteria may be evaluated in the TBL rate case.

TBL Rate Case Risk Analysis - Flow Diagram

